Errata for
Introduction to Structural
Dynamics and Aeroelasticity, Second Edition

Dewey H. Hodges and G. Alvin Pierce
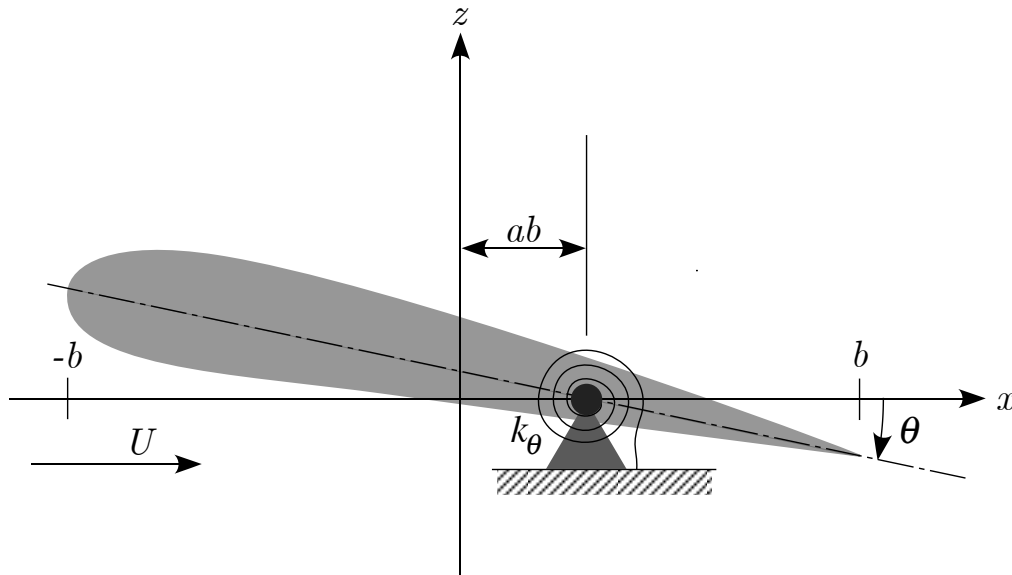Errors in Fourth Printing (to be corrected in Fifth Printing)

December 4, 2015

Figure 5.5: Schematic of the airfoil of a two-dimensional wing that is spring-restrained in pitch

Page Description

16 Replace ρI_p with $\overline{\rho I_p}$ at the beginning of the paragraph above Eq. 2.39.

22 Eq. 2.62 and the text just before it should say, "...the angular momentum of the cross section about P is

$$\mathbf{H}_P = \left(\overline{\rho I_p} \frac{\partial \theta}{\partial t} + md \frac{\partial v}{\partial t} \right) \hat{\mathbf{i}} \tag{2.62}$$

118 Replace ρI_p with $\overline{\rho I_p}$ in the answer to Problem 3.9(b).

190 The spring constant in Fig. 5.5 should be k_θ, not k. The stray θ at the bottom of the figure should be removed. See the corrected version herein.

226 The answers to Problem 2 should be

Answer: (a) amplitude: 0.9931; phase lag: 2.01°

Answer: (b) amplitude: 0.7988; phase lead: 37.0°

Answer: (c) amplitude: 0.7229; phase lead: 37.3°

Answer: (d) amplitude: 0.6008; phase lead: 52.7°